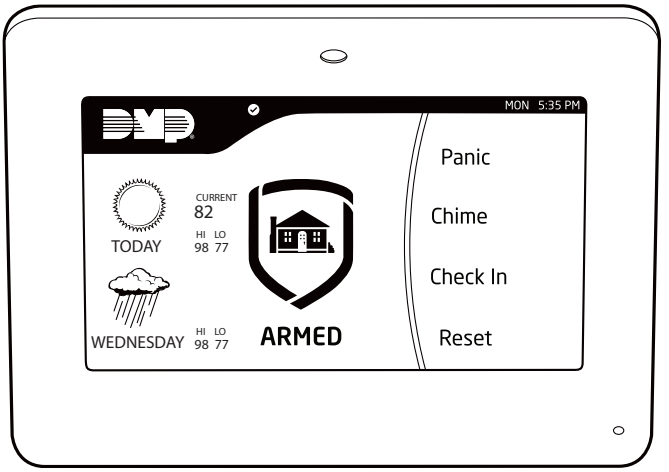
INSTALLATION GUIDE

Models 7872 and 7873
Graphic Touchscreen Keypads



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DMP Keypad Features

DMP Graphic Keypads offer flexible features and functionality in a stylish design.

Each keypad provides:

- AC Power/Armed LED
- Full color touchscreen display
- Internal speaker
- Simple harness connection to 4-wire keypad bus
- Micro SD for customized logo
- Icon-driven operation

The Model 7872 keypad provides four fully programmable Class B, Style A, supervised, power limited protection zones and a built-in proximity card reader designed to read DMP/HID proximity credentials.

The Model 7873 keypad provides four fully programmable Class B, Style A, supervised, power limited protection zones and a built-in proximity card reader designed to read DMP/HID proximity credentials. The Model 7873 keypad also provides a door strike relay and allows Wiegand input from external card readers.

Figure 1: Keypad Main Screen

Touchscreen Display

The 7800 Series keypads have an integrated LCD touchscreen user interface. The display can be set up to display a custom logo image on the main screen. See the Custom Dealer Logo section below. The display can also be programmed to turn off (blank screen) during periods when the keypad is not in use. See Backlighting Brightness under End-User Options.

Warning: DO NOT use any sharp objects to operate the touchscreen such as a pen or pencil.

Cleaning the Touchscreen Display

Select the keypad option from the main carousel menu until it glows and clean the touchscreen using a water dampened soft, lint-free cloth. Apply the water onto the cloth, do NOT apply directly onto the touchscreen. After cleaning, wipe the touchscreen dry with a soft, lint-free cloth. Touch the back arrow before returning to the main screen.

Micro SD Card

The 7800 Series keypads provide a spring-loaded Micro SD card slot on the right edge of the keypad housing. This is used to load a custom logo onto the main screen. Insert the Micro SD card straight in, with the contacts facing the wall, pressing in until a click occurs from the spring mechanism. To remove the Micro SD card, gently press in to allow the spring to eject the card. Grasp the edges of the card with two fingers and remove.

Figure 2: Micro SD Card Slot

Custom Dealer Logo

To display a custom dealer logo on the main screen, contact DMP Marketing at 1-800-641-4282 or privatelabel@dmp.com for information. To add a custom dealer logo, see the Dealer Logo option under Installer Options menu.

Installing the Keypad

All DMP keypad housings are designed to easily install on any single-gang switch box or flat surface. Figure 6 shows the keypad housing base mounting hole locations.

Remove the Cover

The keypad housing is made up of two parts: the cover, which contains the circuit board and components, and the base. Use the following steps and figures to separate the keypad cover and base:

1. Insert a flat screwdriver into one of the slots on the bottom of the keypad and gently lift the screwdriver handle toward you while pulling the halves apart. Repeat with the other slot.
2. Using your hands, gently separate the front from the base and set the cover and components aside.

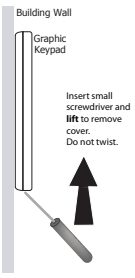


Figure 3: Removing the Keypad Cover

Harness Wiring

Figure 5 shows wiring harness assignments. Observe wire colors when connecting the red, yellow, green, and black wires to the keypad bus. Connect red to panel terminal 7, yellow to terminal 8, green to terminal 9, and black to panel terminal 10. Use 1k Ohm EOL resistors, DMP Model 311, on keypad zones 1 through 4.

The 7872/7873 keypads are supplied with a 12-wire data bus/zone harness. Four wires connect to the keypad bus. The remaining eight wires are for the four zone inputs: two wires for each zone.

The 7873 keypad comes with one 5-wire output/reader harness for connection of external reader/door strike and is inserted into the J4 keypad terminal.

When replacing a 32-character keypad that uses a standard 12-position harness, the 300-7800-12ADPT 12-position wire harness adaptor is available to adapt the larger connector to the smaller 7800 Series connector (J5) without the need to splice wires.

Note: Do not remove the PCB from the keypad housing to install the wiring harness. Firmly grasp the wires near the base and hold the outside edges of the keypad housing. Line up the red and yellow wires with the guides on the board to insert the connector into the J5 keypad terminal. See Figure 4 for example.

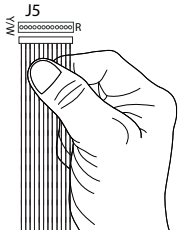


Figure 4: Installing the Wiring Harness

Additional Power Supply

If the current draw for all keypads exceeds the panel output, provide additional current by adding a Model 505-12 auxiliary power supply. Connect all keypad black ground wires to the power supply negative terminal. Run a jumper wire from the power supply negative terminal to the panel common ground terminal. Connect all keypad power (+12 VDC) wires to the power supply positive terminal. Do NOT connect the power supply positive terminal to any panel terminal. Refer to the 505-12 Power Supply Installation Guide (LT-0453).

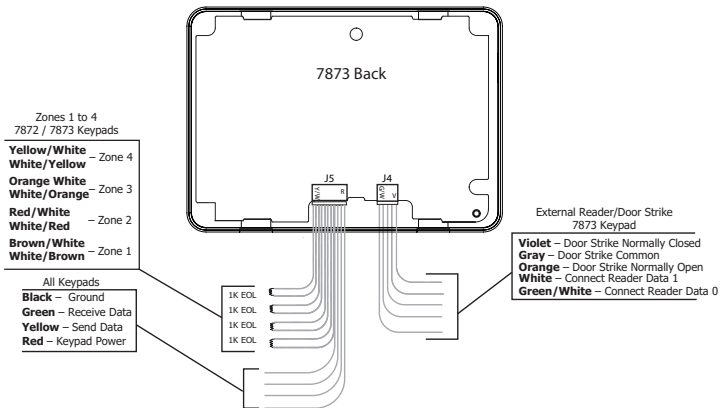


Figure 5: Keypad Back Showing Wiring Harness Assignments

Card Readers

When a proximity credential is presented to an internal or external reader, a beep tone is heard and the Power/Armed LED blinks. This provides both an audible and visual acknowledgement of the credential read.

Internal Access Control Reader

The 7873 and 7872 keypads provide a built-in proximity card reader designed to read DMP/HID 1300 Series proximity credentials.

External Access Control Reader

To accept Wiegand data input from other external card readers, connect a 12 VDC external reader to the 7873 keypad. Connect the Red and Black power wires from the reader to the power wires from the panel. These connect in parallel with the keypad power wires. Connect the Reader (Data 1) wire to the White wire on the 5-wire keypad harness. Connect the Reader (Data 0) wire to the Green/White wire on the 5-wire keypad harness. See Figure 6.

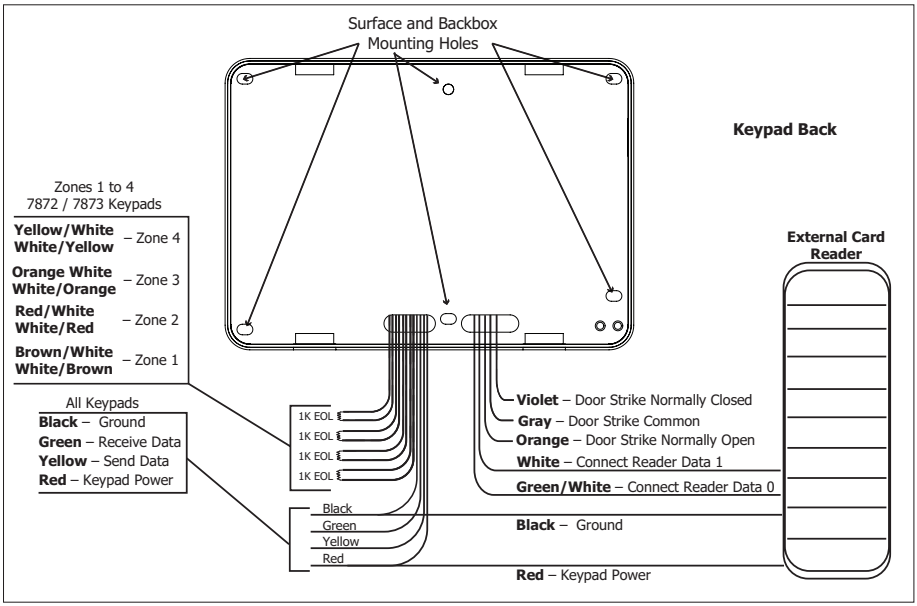


Figure 6: 12 VDC Reader Wiring

Door Strike Relay Specifications

The 7873 keypad provides one internal programmable Form C single pole, double throw (SPDT) relay for controlling door strikes or magnetic locks. Three wires on the 5-wire harness, Violet (N/C), Gray (Com), and Orange (N/O), allow you to connect devices to the relay. The Form C relay draws up to 15mA of current and the contacts are rated for 1 Amp at 30 VDC maximum, resistive.

Wiring the 333 Suppressor

One Model 333 Suppressor is included with the 7873 keypad. If the device being controlled by the relay is connected to the N/O and C wires, install the suppressor on the N/O and C wires. If the device is connected to the N/C and C wires, install the 333 on N/C and C wires. Refer to Figure 7.

Door Strike Relay Operation

As soon as the user code sent from the reader is verified by the panel, the keypad door strike relay activates for 5 seconds. During this time, the access door connected to Zone 2 must be opened to start the programmed entry/exit timer and zone Bypass (Soft-Shunt™) if programmed and used.

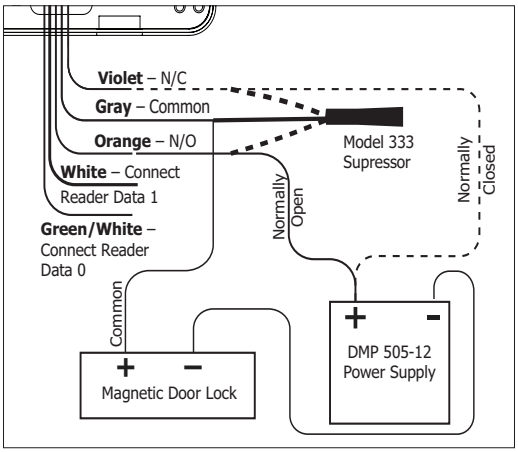


Figure 7: 5-wire Harness/Suppressor Installation

Note: The 5-second door strike is panel programmable when the keypad is used on an XR100/XR500 or XR150/XR350/XR550 Series panel. Refer to the panel programming guide as needed.

Zone 2 Door Contact with Bypass (Soft-Shunt)

If the door being released by the 7873 keypad is protected, you can provide a programmed bypass time by connecting its contact to Zone 2 (White/Red pair) on the keypad and enabling the Bypass feature. See ZONE 2 BYPASS later in this document. Door contacts may be N/C or N/O.

Zone 3 Request to Exit

You can also connect a N/O PIR (or other motion sensing device) or a mechanical switch to Zone 3 (White/Orange pair) on the 7873 keypad to provide request to exit capability. See ZONE 3 EXIT later in this document. When Zone 3 shorts, the keypad relay activates for between 5 and 250 seconds. This REX time is programmable with a default of 5 seconds. See ZONE 3 REX STRIKE TIME later in this document.
During this time, the user can open the protected door to start the programmed Bypass entry/exit timer. If the door is not opened within 5 seconds, the relay restores to its locked state.

Note: A Zone 3 Request to Exit is inhibited for 3 seconds after the keypad reads a card and a door strike occurs. This is to allow area entry and pass under a REX PIR.

Keypad Backlighting

The touchscreen illuminates at the maximum brightness any time the display is pressed. During an alarm condition, the touchscreen turns Red. When all alarm conditions are cleared from the display, the keyboard, logo, and the user-selected brightness is restored.

AC Power/Armed LED Operation

The LED indicates the Power and Armed status of the panel. Depending on the operation, the LED displays in Red or Blue as listed in the table.

Color and Activity	Operation
Blue Steady	Panel Disarmed, AC Power OK, Battery OK
Blue Blinking	Panel Disarmed, AC Power OK, Battery Fault
No Light	Panel Disarmed, AC Power Fault, Battery OK
Red Steady	Panel Armed, AC Power OK, Battery OK
Red/Blue Alternate	Panel Armed, AC Power OK, Battery Fault
Red Blinking	Panel Armed, AC Power Fault, Battery OK

Select Areas

There are four Select Areas in the display as seen in Figure 8. These Select Areas are one of the features that make the system so easy to operate. They allow you to make selections by pressing the area over each key, icon, or other selection to operate the keypad.

Warning: DO NOT use any sharp objects to operate the touchscreen such as a pen or pencil.

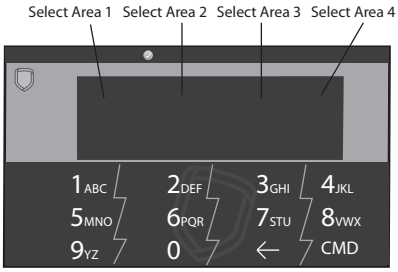


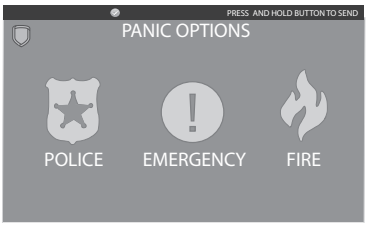
Figure 8: Touchscreen Select Areas

Panic Icons

Optional Panic functions allow users to send Police, Emergency, or Fire reports to the central station (See Figure 9). You must enable the Panic function in Installer Options in order to use the Panic Icons. See Programming Keypad Options later in this document.

Press the panic icon in the carousel menu to bring up the Panic Options menu. This icon can be seen in Figure 10 below. Press the panic menu icon for 2 seconds until a beep is heard. At the beep, the panel sends the following zone alarm reports to the central station:

Panic - Zone 19 + Device Address
Emergency - non-medical - Zone 29 + Device Address
Fire - Zone 39 + Device Address



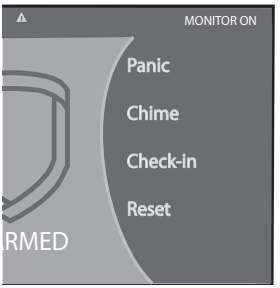


Figure 9 and Figure 10: Graphic Keypad Panic Icons

Internal Speaker Operation

All keypads emit standard tones for screen presses, entry delay, and system alerts. The speaker also provides distinct burglary, fire, zone monitor, and prewarn cadences. The keypads provide an alternate prewarn with alarm cadence that occurs when the status list displays a zone alarm.

End-User Options

All keypads provide three keypad adjustments the end-user can make through a User Options Menu. The user can also view the keypad model number and address. Scroll through the carousel menu and press the Options icon until it glows. The screen displays the available options shown below. See Figure 11 for example.

Backlighting Brightness

Set the backlight illumination and AC Power/Armed LED brightness level. In the touchscreen display below SET BRIGHTNESS, press the left < to lower and the right > to raise the backlight brightness. If the brightness level is lowered, it reverts to maximum intensity whenever the screen is pressed during normal operation. If the screen is not pressed, and the speaker has not sounded for 30 seconds, the user-selected standby brightness level restores.

Internal Speaker Tone

Set the keypad speaker tone for screen presses. At the SET TONE display, use the left < to lower the tone and the right > to raise the tone.

Internal Volume Level

Set the keypad speaker volume level for screen presses, entry delay, and zone monitor conditions. During alarm, entry delay, and trouble tone conditions, the volume is always at maximum level. Use the left < to decrease the keypad volume and the right > to increase the volume.

Model Number

The LCD displays the keypad model number and firmware version and date in the top right corner of the screen. The user cannot change this information.

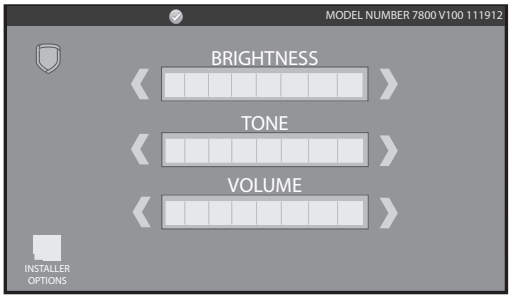


Figure 11: Options Screen

Installer Options Menu

Keypad Options and Keypad Diagnostic menus allow installing and service technicians to configure and test keypad operation.

Access the Installer Options Menu

Access the Options menu through the carousel menu. While in the Option display, press the Installer Options icon and enter the code 3577 (INST) at the keypad and press CMD.

The Options menu allows you to set the keypad address, select Supervised or Unsupervised mode, selectively enable the Panic keys, Bypass, Request-to-Exit, and set entry card options.

Note: All programming options display on all keypad models, however, actual operation for some programming options is restricted to the appropriate model.

Programming Keypad Options

KPD KPD OPT DIAG STOP	**Keypad Options (KPD OPT)** To program keypad options, press KPD OPT.
CURRENT KEYPAD ADDRESS: 01	**Keypad Address** Set the keypad address from 01 to 08 with the XT30/XT50, 01 to 08 with the XR100 and XR150 Series, 01 to 16 with the XR500 Series, and 01 to 16 with the XR350/XR550 Series. The default address is set at 01. To change the current address, press the address display and enter the new address. It is not necessary to enter a leading zero for addresses 01 to 09.
KEYPAD MODE: SUP * UNSUP	**Keypad Type** Configure the keypad for either Supervised or Unsupervised operation. Keypads with zones connected to them must be supervised and cannot share an address with other keypads. Unsupervised keypads can operate together sharing the same address. Zones cannot be used on unsupervised keypads. To change the current setting, press the SUP or UNSUP. An asterisk appears next to the selected option. **Note:** Unsupervised addresses cannot be used when Device Fail Output has a programmed value other than zero.
DEFAULT KPD MSG:	**Default Keypad Message** Enter a custom message of up to 16 characters to appear on the keypad display top line whenever that line is not used for any other purpose. Press any Select area to clear the current message and enter a new custom display.
ARM PANIC KEYS: *PN *EM *FI	**Arm Panic Keys** Use this option to configure the Panic Icons. To enable or disable a Panic Icon, press the icon name: PN (Panic), EM (Emergency), and FI (Fire). Once the panic icon is enabled, an asterisk displays next to the description and the respective Panic icons display for the user. Refer to the Panic Icon Options section in this document.

ACTIVATE ZONE 2
BYPASS: NO YES

Zone 2 Bypass (Soft-Shunt)
Select YES to enable the Bypass option on zone 2 as described earlier in this document. This zone provides the bypass for door contacts. This zone must be programmed into the panel.

ZONE 2 BYPASS
TIME: 40

Zone 2 Bypass (Soft-Shunt) Time
Enter the number of Bypass seconds to elapse before the bypass timer expires. Range is from 20 to 250 seconds. Press the display to enter the number of seconds. Once the door strike relay is activated, the user has 5 seconds to open the door connected to zone 2. The zone is then bypassed for the programmed time or until the contact restores to normal. Ten seconds before the Bypass entry/exit time expires, the keypad beeps once every second. If the door remains open when the timer expires a zone open/short is sent to the panel for Zone 2. The default is 40 seconds.
Figure 12 shows how the Bypass works using the default 40 second timer.

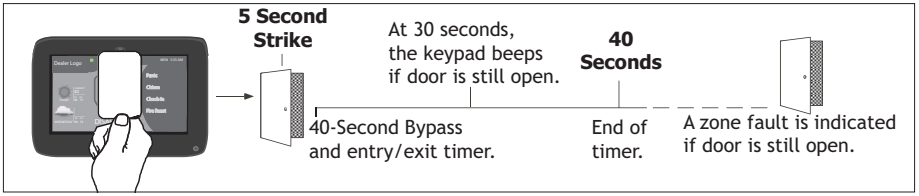

5 Second Strike
At 30 seconds, the keypad beeps if door is still open.
40 Seconds
40-Second Bypass and entry/exit timer.
End of timer.
A zone fault is indicated if door is still open.

Figure 12: Door Strike Relay Operation Time Line

RELOCK ZONE 2
FAULT: NO YES

Relock on Zone 2 Fault? (7873 only)
Select NO to leave the relay on when Zone 2 faults to an open or short condition during Bypass. Select YES to turn the relay off when Zone 2 faults open or short during bypass. The default is NO.

ACTIVATE ZONE 3
EXIT? NO YES

Zone 3 REX (7873 only)
Select YES to enable the Request to Exit feature on zone 3. When zone 3 shorts, the keypad relay activates. During this time, the user can open the protected door to start the programmed Bypass entry/exit timer. If the door is not opened within the time programmed in the Zone 3 REX Strike Time, the relay restores the door to its locked state. No panel programming is required.

ZN 3 REX STRIKE
TIME: 5

Zone 3 REX Strike Time (7873 only)
Enter the number of REX seconds to elapse. Range is from 5 to 250 seconds. Press the display to enter the number. The default is 5 seconds.

NO OF USER CODE DIGITS: 5

Number of User Code Digits
The keypad recognizes user codes from 4 to 10 digits in length. Press the display to enter the user code digit length being used by the panel. Default is 5.
When searching the bit string for the user code, the digits are identified and read from left to right.

ALL?: NO YES DELAY: 2

Arming/Disarming Wait Time
Select the number of seconds (1-9) the keypad should wait when an area system displays ALL? NO YES during arming/disarming or a HOME/SLEEP/AWAY system waits during arming only. If NO or YES, or HOME, SLEEP, or AWAY is not manually selected before the delay expires, the keypad automatically selects the YES or the AWAY key. Enter zero (0) to disable this feature. The delay also occurs when any credential is presented for arming the HOME/SLEEP/AWAY system.

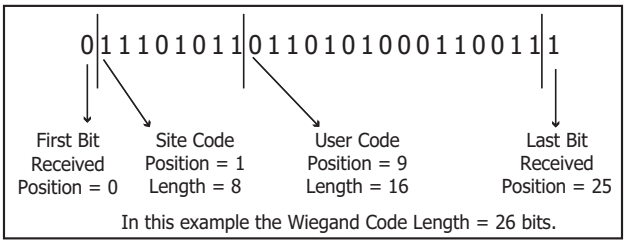
CARD OPTIONS DMP CUSTOM

Card Options
Select DMP to indicate the reader sends a 26-bit DMP data string. To save the DMP option, press DMP and then press COMMAND. Select CUSTOM if using a non-DMP credential.
To select CUSTOM press the right side of the display. When CUSTOM displays, press COMMAND.
Default is DMP.

Custom Card Definitions

WIEGAND CODE LENGTH 26

Card Options
Wiegand Code Length
When using a custom credential, enter the total number of bits to be received in Wiegand code including parity bits. Press the display to enter a number between 0-255 to equal the number of bits. Default is 26 bits. Typically, an access card contains data bits for a site code, a user code, and start/stop/parity bits. The starting position location and code length must be determined and programmed into the keypad.


0 1 1 1 0 1 0 1 1 0 1 1 0 1 0 1 0 0 0 1 1 0 0 1 1 1
First Bit Received Position = 0
Site Code Position = 1 Length = 8
User Code Position = 9 Length = 16
Last Bit Received Position = 25
In this example the Wiegand Code Length = 26 bits.
Figure 13: HID 26-Bit Wiegand Data Stream Bit Location Example

SITE CODE:
POSITION 1

Site Code Position
Enter the site code start position in the data string. Press any select area to enter a number between 0-255. Press COMMAND to save the entry. Default is 1.

SITE CODE:
LENGTH 8

Site Code Length
Enter the number of characters the site code contains. Press any select area to enter a number between 1-16. Press COMMAND to save the entry. Default is 8.

USER CODE:
POSITION 9

User Code Position
Define the User Code start bit position. Press any select area to enter a number between 0-255. Press COMMAND to save the entry. Default is 9.

USER CODE:
LENGTH 16

User Code Length
Define the number of User Code bits. Press any select area to enter a custom number. Custom numbers can only be a number between 16-32. Press COMMAND to save the entry. The default is the DMP value of 16.

REQUIRE SITE
CODE: NO YES

Require Site Code
Press YES to use a site code, for non-DMP cards, and press CMD to view the site code entry display. Default is NO. In addition to User Code verification, door access is only granted when any one site code programmed at the SITE CODES entry option matches the site code received in the Wiegand string. You can program up to eight three-digit site codes.
Note: A card with a site code greater than three digits cannot be used. Use only cards with three-digit site codes.

SITE CODES 1-4
> > > >

Site Codes 1-4
Enter site codes 1-4 (left to right separated by > sign). Press the > sign to add, delete, or change the site code. Press COMMAND to save the entry.
Site code range is 0-999.

SITE CODES 5-8
> > > >

Site Codes 5-8
Enter site codes 5-8 (left to right separated by > sign). Press the > sign to add, delete, or change the site code. Press COMMAND to save the entry.
Site code range is 0-999.

NO COMM WITH PNL
OFF

No Communication With Panel
This option defines the relay action when communication with the panel has not occurred for five seconds. Press any select area to display CHOOSE ACTION.
The default is Relay Always Off.

CHOOSE ACTION
OFF SITE ANY ON

Choose the No Communication with Panel action that is required.
Press OFF to choose [Default] (Relay Always Off) — The relay does not turn on when any Wiegand string is received. Off does not affect any REX operation.

Press SITE to choose (Accept Site Code) — Door access is granted when the Wiegand site code string received matches any site code programmed at SITE CODE ENTRY. For details refer back to the REQUIRE SITE CODE option.
Press ANY to choose (Any Wiegand Read) — Door access is granted when any Wiegand string is received.
Press ON to choose (Relay Always On) — The relay is always on.
Press the COMMAND key to display the next action.

CHOOSE ACTION
LAST

Press LAST to choose (Keep Last State) — The relay remains in the same state and does not change when communication is lost.

After choosing the action, the NO COMM WITH PNL option and the newly defined action display. Press COMMAND to save the entry. Press the Back Arrow to return to REQUIRE SITE CODE:.

SYSTEM
AREA A/P H/A HSA

System
Configure the keypad as the same system type selected in System Options panel programming. Select HSA when zones are assigned to Bedrooms for the Sleep area to be active.

DEALER LOGO
ADD DELETE

Dealer Logo
Use this option to add a custom dealer logo to the Main Screen of the keypad. Prior to selecting ADD, insert a micro SD card into the slot on the right side of the keypad with the logo file. Select ADD to upload the file.

ADDING LOGO
SURE? NO YES

The keypad will display ADDING LOGO SURE? Select YES to proceed. While the logo is being uploaded, the keypad displays ADDING LOGO. ADDING LOGO COMPLETED displays to confirm a successful upload.

DEALER INFO
ADD DELETE

Select ADD at the DEALER INFO prompt to include information about the dealer when the logo is pressed on the Main Screen. The keypad displays ADDING INFO SURE? to confirm your selection. Press YES to proceed. While the info is being uploaded, the keypad displays ADDING INFO. ADDING INFO COMPLETED displays to confirm a successful upload. Once dealer logo and information have been successfully uploaded press in and release micro SD card to eject.

ADDING INFO
SURE? NO YES

Contact DMP Marketing at 1-800-641-4282 or privatelabel@dmp.com for information about acquiring a logo.

Note: For instructions on loading a Custom Dealer Logo to the Main Screen of the keypad prior to being connected to the panel, see Additional Programming; Preloading Custom Dealer Logo and Information.

Carousel Z-Wave Items

The Z-Wave Carousel Items screen allows you to select the Z-Wave options to be displayed in the Carousel menu on the main screen. Press the item to select and a check-mark displays. Press again to de-select. Items for the Carousel include Lights, Doors, Thermostats, and Favorites. Pressing CMD at the bottom of the screen advances to the next screen and the Back Arrow returns you to the previous option. Default is no items selected.

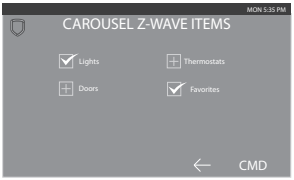


Figure 14: Carousel Z-Wave Items Screen

Shortcut Items

The Shortcut Items screen allows you to select additional menu items to be displayed in the Carousel menu on the main screen. Press the item to select and a check-mark displays. Press again to de-select. Items for the Carousel include User Codes, Schedules, and Events. Default is no items selected.

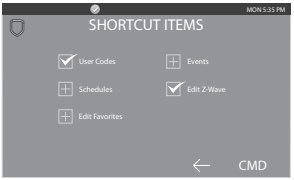


Figure 15: Shortcut Items Screen

Select Z-Wave Edit to display the Z-Wave Edit icon on the Lights, Doors and Thermostats screens. Select Edit Favorites to display the Z-Wave Edit icon on the Favorites screen. If NO is selected, the Z-Wave Edit icon will not be displayed. For more information, see Z-Wave Edit Icon below.

Z-Wave Edit Icon

The Z-Wave Edit icon is a small, pencil shaped, shortcut that may be enabled and displayed in the lower left corner of the Z-Wave Lights, Doors, Thermostats, and Favorites screens accessed from the Carousel menu. This shortcuts allows the user to add, edit or remove Z-Wave devices and Favorites. When the icon is pressed on the Lights, Doors, or Thermostats screens, the keypad prompts for a User Code. Enter a valid user code and Z-WAVE SETUP? ADD LIST REMOVE displays. When the icon is pressed on the Favorites screen, the keypad prompts for a User Code. Enter a valid user code and FAVORITE NUMBER: - displays. For more information on Z-Wave devices and Favorites please see the panel user guide.

Figure 16: Z-Wave Edit Icon

Select Language

The Select Language screen allows you to select the language for text on the Home Screen and Carousel Menu Screens. Press the item to select and a check mark displays. Only one language may be selected. Default is English.

Note: The keypad does not translate information from the panel that is displayed in the Keypad screen such as the Status list.

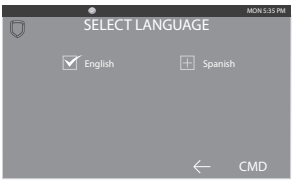


Figure 17: Select Language Screen

Restart Keypad

The Restart Keypad screen allows the installer to restart the keypad to initiate a firmware update from a Micro SD card.

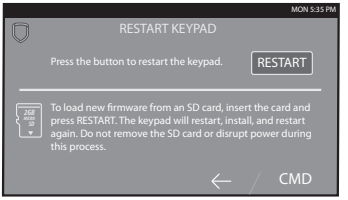

MON 5:35 PM
RESTART KEYPAD
Press the button to restart the keypad.
RESTART
To load new firmware from an SD card, insert the card and press RESTART. The keypad will restart, install, and restart again. Do not remove the SD card or disrupt power during this process.
CMD

Figure 18: Restart Keypad Screen

Updating Firmware using Restart

1. Insert a Micro SD card into the Micro SD Card Slot of a computer.
2. Locate and download the firmware update RU file from dmp.com/dealer_direct and save it to the root directory of the Micro SD card.
3. Insert the Micro SD card into the Micro SD card slot on the right side of the 7800 Series keypad.
4. Enter the Installer Menu (3577), choose KPD OPT and press CMD to the new Restart Keypad screen just after Select Language.
5. Press RESTART. The keypad will load the new firmware from the Micro SD Card and then the keypad automatically restarts. Caution, do not remove the Micro SD card or disrupt power during this process.
6. When the keypad restart is complete, remove the Micro SD card from the keypad.

Accessing Keypad Diagnostics

If necessary, refer to Access the Options Menu earlier in this document.

KPD KPD	
OPT DIAG	STOP

Keypad Diagnostics (KPD DIAG)

This option displays Zone Test.

Z1 OPEN	Z2 OPEN
Z3 OPEN	Z4 OPEN

Zone Test

This option allows the keypads to display the current electrical status of the four protection zones. The status is shown as OPEN, SHRT, or OKAY.

Note: The Zone Test displays on other keypads without built-in zones, but is not operational.

INPUT WIEGAND

Input Wiegand

This option tests the internal and external reader input from proximity credentials. The display shows OKAY each time a good proximity read is received.

Exiting the Installer Options

Press the CMD key until the display returns to the Installer Options screen. Select STOP to exit the Installer Options function.

Additional Programming

The keypads allow users to present a proximity credential to the built-in proximity reader. Users can also manually enter their user code into the keypad. The keypad verifies the user code and its authority with the panel. Additionally, the 7873 keypad activates the on-board Form C relay releasing a door strike or magnetic lock. To provide added flexibility, the 7873 Keypads allow connection of an external Wiegand output compatible reader.

Preloading Custom Dealer Logo Information

A custom dealer logo and dealer information may be added to the Main Screen of the keypad prior to being connected to the panel. This procedure requires the use of a separate 12 Volt power supply for the keypad. Use the following steps:

1. Connect the 12 Volt DC power supply to the keypad.
2. Power up the keypad and the keypad screen displays SYSTEM BUSY.
3. Press COMMAND to display ENTER CODE:.
4. Enter 3577 and press COMMAND to access the Installer Menu.
5. Press KPD OPT to access keypad options menu.
6. Press COMMAND until DEALER LOGO ADD DELETE displays.
7. Insert Micro SD card with dealer logo into the slot on the right side of the keypad.
8. Press ADD. Keypad displays ADDING LOGO SURE? YES NO.
9. Press YES to load dealer logo. Keypad displays ADDING LOGO.
10. When the dealer logo is successfully loaded the keypad displays ADDING LOGO COMPLETE.
11. Press COMMAND to exit Dealer Logo menu.
12. Keypad displays DEALER INFO ADD DELETE.
13. Press ADD. Keypad displays ADDING INFO SURE? YES NO
14. Press YES to load dealer information. Keypad displays ADDING INFO.
15. When the dealer information is successfully loaded the keypad displays ADDING INFO COMPLETE.
16. Press COMMAND to exit to Dealer Info menu.
17. Press Stop to exit Installer Menu.
18. Press in and release the micro SD card to eject

Note: If for any reason the logo or information fails to load the keypad displays BAD FORMAT. Contact DMP Marketing at 1-800-641-4282 or privatelabel@dmp.com for information about acquiring a logo.

Programming Cards into the System

Access the User Menu by pressing the Keypad icon in the carousel menu on the main screen, then press CMD until MENU? NO YES displays.

From the User Menu, select USER CODES. Choose ADD. At the ENTER CODE: - display, present the credential to the reader. The keypad works by reading the 4 to 10-digit user code from the data sent by the access control reader. For more information, refer to Entry Cards in the programming section of this document and the panel User's Guide section on adding, deleting, and changing user codes.

Proximity Credentials Compatibility

DMP Keypads with internal proximity readers are compatible with most standard 125Khz Prox credentials available from HID and all DMP proximity credentials. DMP Keypads are not compatible with iClass.

There are custom and non-standard credentials from HID that are not compatible with DMP proximity keypads. If you are using HID cards that have not been purchased directly from DMP, it is recommended to thoroughly test the application fully before installation. DMP does not guarantee compatibility with credentials not purchased from DMP.

User's Guide

This User's Guide covers 7872 and 7873 keypads and contains three different sections: Keypad Arming and Disarming, Keypad Door Strike, and Keypad Entry Delay. All of the examples displayed assume that CLOSING CODE is YES in panel programming.

Note: Figures 18 through 20 show the user presenting their card to the keypad. When an external reader is connected to a 7873 keypad, the user presents their card to the reader rather than to the keypad.

Keypad Arming and Disarming

Area system Arming and Disarming

Press the lock icon and select the arming/disarming option. The keypad displays ENTER CODE: -. Present your card to the reader. Once validated by the system, all areas assigned to your code arm or disarm automatically and the 7873 keypad Door Strike relay activates.

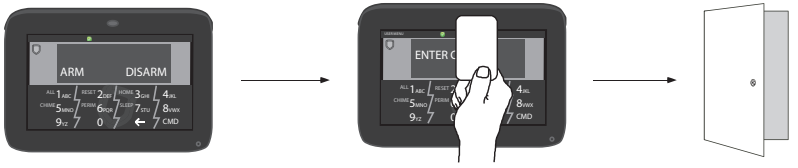


Figure 19: Area Arming and Disarming

All/Perimeter System Arming and Disarming

Present your card to the reader, the keypad displays PERIM ALL when arming. Select the desired option. Once validated by the system, the selected areas arm or disarm automatically. On 7873 keypads, the Door Strike relay then activates.

Home/Away System Arming and Disarming

Present your card to the reader. If the system is armed, once the card is validated, all areas are disarmed and the keypad displays ALL SYSTEM OFF. If the system is disarmed when you present your card, once the card is validated, HOME SLEEP AWAY displays. Manually select HOME, SLEEP, AWAY or after a short time-out, all areas automatically arm in the AWAY mode.

Keypad Door Strike

Area and All/Perimeter Door Strike

From the Status List, present your card to the reader. Once the system validates the card, the Door Strike relay activates. Home/Away systems only activate the 7873 Door Strike relay when arming and disarming.

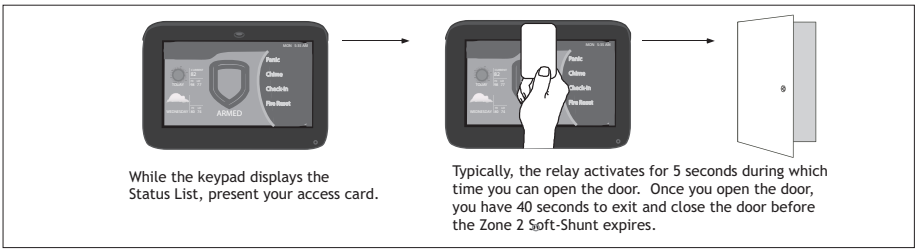

ARMED
Panic
Chime
Check-In
Fire Reset
While the keypad displays the Status List, present your access card.
Typically, the relay activates for 5 seconds during which time you can open the door. Once you open the door, you have 40 seconds to exit and close the door before the Zone 2 Soft-Shunt expires.

Figure 20: Present Access Card

Keypad Entry Delay

All Systems

Once the entry delay starts, the keypad sounds an entry tone and displays ENTER CODE: - . Present your card to the reader. Once validated, the system disarms all areas accessible by you and activates the 7873 Door Strike relay. Area systems provide a delay to allow selected areas only to be disarmed.

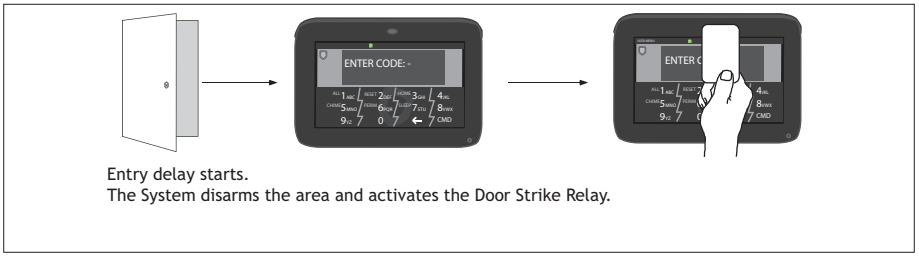


Figure 21: Entry Delay

FCC Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made by the user and not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Compliance Specifications

The keypad LED brightness setting must be set above the minimum setting.

Degraded Mode must be set to Relay Always Off.

Do not mount keypad on metal surfaces or metallic electrical boxes.

For listed access control applications, the keypad must be installed within the protected area and all REX devices must be Listed to UL 294.

Wiring Specifications for Keypad Bus

When planning a keypad bus installation, keep in mind the following specifications:

1. DMP recommends using 18 or 22-gauge unshielded wire for all keypad and LX-Bus circuits. Do Not use twisted pair or shielded wire for LX-Bus and keypad bus data circuits. To maintain auxiliary power integrity when using 22-gauge wire with a Model 7872 or 7873 do not exceed 225 feet. When using 18-gauge wire do not exceed 500 feet. Install an additional power supply to increase the wire length or add devices.
2. Maximum distance for any one circuit (length of wire) is 2,500 feet regardless of the wire gauge. This distance can be in the form of one long wire run or multiple branches with all wiring totaling no more than 2,500 feet. As wire distance from the panel increases, DC voltage on the wire decreases.
3. Maximum number of devices per 2,500 feet circuit is 40.

   Note: Each panel allows a specific number of supervised keypads. Add additional keypads in the unsupervised mode. Refer to the panel installation guide for the specific number of supervised keypads allowed.
4. Maximum voltage drop between the panel (or auxiliary power supply) and any device is 2.0 VDC. If the voltage at any device is less than the required level, add an auxiliary power supply at the end of the circuit. When voltage is too low, the devices cannot operate properly.

Refer to the LX-Bus/Keypad Bus Wiring Application Note (LT-2031) for more information. Also see the 710 Module Installation Sheet (LT-0310).

Keypad Specifications

MODEL	NORMAL/ STANDBY CURRENT	ALARM CURRENT	FOUR ZONES	INTERNAL PROX READER	WIEGAND INPUT	INTERNAL DOOR STRIKE RELAY
7872	145mA + 1.6mA per active zone	215mA + 2mA per active zone	X	X		
7873	143mA + 1.6mA per active zone	243mA + 2mA per active zone	X	X	X	X

Specifications

Operating Voltage	12 VDC
Dimensions	5.8” W x 4.135” H x 0.6” D

Compatibility

All keypads are compatible with all XR100/XR500 Series, XR150/XR350/XR550 Series, and XT30/XT50 Series panels.

Accessories

Keypad Wiring Harness

300-7800-12ADPT	12-Wire Harness adapter
300-7800-5	5-Wire Harness
300-7800-12	12-Wire Harness

Proximity Credentials

1306P	Prox Patch™
1306PW	Prox Patch™ 26-Bit
1326 HID	ProxCard II® Card
1386 HID	ISOProx II® Card
1346 HID	ProxKey II® Access Device

Proximity Readers for 7873 keypads

PP-6005B ProxPoint® Plus	30mA Standby	75mA Peak
MP-5365 MiniProx™	20mA Standby	110mA Peak
PR-5455 ProxPro II®	25mA Standby	125mA Peak
TL-5395 Thinline™ II®	20mA Standby	115mA Peak

Keypad Mounting

695-7800	In Wall Mount Backbox
698-7800	Plastic Keypad Wall Cover
699-7800	Keypad Deskstand with Cord

Certifications

California State Fire Marshall (CSFM)
FCC Part 15 RFID Reader FCC ID: CCKPC0131
Industry Canada ID: 5251A-PC0131

ANSI/UL 294	Access Control System Units
ANSI/UL 365	Police Connected Burglar
ANSI/UL 609	Local Burglar
ANSI/UL 1023	Household Burglar
ANSI/UL 1076	Proprietary Burglar
ANSI/UL 1610	Central Station Burglar
ANSI/UL 985	Household Fire Warning